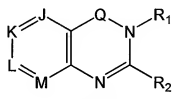
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing Of Claims

1. (currently amended) A compound ~~comprising of~~ Formula XXXVII:



XXXVII

wherein

Q is selected from the group consisting of CO, CS, or C=NR_9;

J, K, L, and M are each independently CR_{12}, provided that at least one of K and L is CR_{12} where R_{12} is not hydrogen;

R_1 is -ZR_m~~, where~~ ;

Z is ~~a moiety providing 1-6 atom separation between R_m and the ring to which R_1 is attached, and~~ selected from the group consisting of -CH_2-, -CH_2CH_2-, -$CH_2CH_2CH_2$-, -C(O)-, -$CH_2C(O)$-, -C(O)CH_2-, -CH_2-C(O)CH_2-, -C(O)CH_2CH_2-, -$CH_2CH_2C(O)$-, -O-, -OCH_2-, -CH_2O-, -CH_2OCH_2-, -OCH_2CH_2-, -CH_2CH_2O-, -N(CH_3)-, -$NHCH_2$-, -CH_2NH-, -CH_2NHCH_2-, -$NHCH_2CH_2$-, -CH_2CH_2NH-, -NH-C(O)-, -NCH_3-C(O)-, -C(O)NH-, -C(O)NCH_3-, -NHC(O)CH_2-, -C(O)$NHCH_2$-, -C(O)CH_2NH-, -$CH_2NHC(O)$-, -$CH_2C(O)NH$-, -$NHCH_2C(O)$-, -S-, -SCH_2-, -CH_2S-, -SCH_2CH_2-, -CH_2SCH_2-, -CH_2CH_2S-, -C(O)S-, -C(O)SCH_2-, -$CH_2C(O)S$-, -C(O)CH_2S-, -$CH_2SC(O)$-, –CHR_9-, –C(R_9)(R_9)-, -C(S)-, -C(NH)-, -C(NR_9)-, -N(H)- and -N(R_9)-;

R_m is ~~selected from the group consisting of a substituted or unsubstituted (C_{3-7})cycloalkyl,~~ an aryl~~, hetero(C_{3-7})cycloalkyl and heteroaryl~~, either unsubstituted or substituted with one or more substituents selected from the group consisting of (C_{1-10})alkyl, (C_{3-12})cycloalkyl, hetero(C_{3-12})cycloalkyl, aryl(C_{1-10})alkyl, heteroaryl(C_{1-5})alkyl,

(C_{9-12})bicycloaryl, hetero(C_{4-12})bicycloaryl, carbonyl (C_{1-3})alkyl, thiocarbonyl (C_{1-3})alkyl, sulfonyl (C_{1-3})alkyl, sulfinyl (C_{1-3})alkyl, imino (C_{1-3})alkyl, amino, aryl, heteroaryl, hydroxy, alkoxy, aryloxy, heteroaryloxy, carbonyl, cyano, nitro, halo, imino, sulfonyl and sulfinyl groups;

R_2 is -UV~~, where~~;

U is ~~a moiety providing 1-6 atom separation between V and the ring to which R_2 is attached and~~ selected from the group consisting of -CH_2-, -CH_2CH_2-, -$CH_2CH_2CH_2$-, -C(O)-, -$CH_2C(O)$-, -$C(O)CH_2$-, -CH_2-$C(O)CH_2$-, -$C(O)CH_2CH_2$-, -$CH_2CH_2C(O)$-, -O-, -OCH_2-, -CH_2O-, -CH_2OCH_2-, -OCH_2CH_2-, -CH_2CH_2O-, -$N(CH_3)$-, -$NHCH_2$-, -CH_2NH-, -CH_2NHCH_2-, -$NHCH_2CH_2$-, -CH_2CH_2NH-, -NH-C(O)-, -NCH_3-C(O)-, -C(O)NH-, -$C(O)NCH_3$-, -$NHC(O)CH_2$-, -$C(O)NHCH_2$-, -$C(O)CH_2NH$-, -$CH_2NHC(O)$-, -$CH_2C(O)NH$-, -$NHCH_2C(O)$-, -S-, -SCH_2-, -CH_2S-, -SCH_2CH_2-, -CH_2SCH_2-, -CH_2CH_2S-, -C(O)S-, -$C(O)SCH_2$-, -$CH_2C(O)S$-, -$C(O)CH_2S$-, -$CH_2SC(O)$-, -CHR_9-, -$C(R_9)(R_9)$-, -$N(H)$-, -$N(R_9)$-, (C_{3-7})cycloalkyl, (C_{3-6})heterocycloalkyl, azetidin-1-yl, pyrrolidin-1-yl, piperidin-yl, hexahydroazepan-1-yl and piperazin-1-yl, each unsubstituted or substituted with a substituent selected from the group consisting of aldehyde, alicyclic, aliphatic, alkyl, alkylene, alkylidene, amide, amino, aminoalkyl, aromatic, aryl, bicycloalkyl, bicycloaryl, carbamoyl, carbocyclyl, carboxyl, carbonyl group, cycloalkyl, cycloalkylene, ester, halo, heterobicycloalkyl, heterocycloalkylene, heteroaryl, heterobicycloaryl, heterocycloalkyl, oxo, hydroxy, iminoketone, ketone, nitro, oxaalkyl, and oxoalkyl moieties;

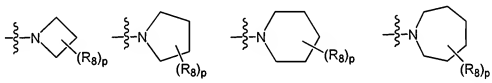
V comprises ~~a basic nitrogen atom that is capable of interacting with a carboxylic acid side chain of an active site residue of a protein~~ a primary, secondary or tertiary amine, a heterocycloalkyl comprising a nitrogen ring atom, or a heteroaryl comprising a nitrogen ring atom;

each R_9 is independently hydrogen or is selected from the group consisting of alkyl, cycloalkyl, heterocycloalkyl, arylalkyl, heteroarylalkyl, bicycloaryl, and heterobicycloaryl, each ~~substituted or unsubstituted~~ unsubstituted or substituted with a substituent selected from the group consisting of aldehyde, alicyclic, aliphatic, alkyl, alkylene, alkylidene, amide, amino, aminoalkyl, aromatic, aryl, bicycloalkyl, bicycloaryl, carbamoyl, carbocyclyl, carboxyl, carbonyl group, cycloalkyl, cycloalkylene, ester, halo, heterobicycloalkyl, heterocycloalkylene, heteroaryl, heterobicycloaryl, heterocycloalkyl, oxo, hydroxy, iminoketone, ketone, nitro, oxaalkyl, and oxoalkyl moieties; and

each R_{12} is hydrogen or is independently selected from the group consisting of halo, perhalo(C_{1-10})alkyl, CF_3, alkyl, aryl, heteroaryl, aminosulfonyl, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, cycloalkyl, heterocycloalkyl, amino, thio, cyano, nitro, alkoxy, a carbonyl group, imine group, sulfonyl group and sulfinyl group, each ~~substituted or~~ unsubstituted or substituted with one or more substituents selected from the group consisting of aldehyde, alicyclic, aliphatic, alkyl, alkylene, alkylidene, amide, amino, aminoalkyl, aromatic, aryl, bicycloalkyl, bicycloaryl, carbamoyl, carbocyclyl, carboxyl, carbonyl, cycloalkyl, cycloalkylene, ester, halo, heterobicycloalkyl, heterocycloalkylene, heteroaryl, heterobicycloaryl, heterocycloalkyl, oxo, hydroxy, iminoketone, ketone, nitro, oxaalkyl and oxoalkyl moieties, or two R_{12} are taken together to form a ring fused to or bridged to the ring formed by J, K, L and M.

2-6. (cancelled)

7. (original) A compound according to claim 1, wherein R_2 is selected from the group consisting of



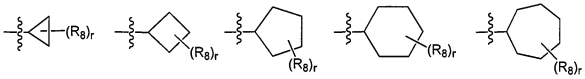
wherein p is 0-12 and each R_8 is independently selected from the group consisting of halo, perhalo(C_{1-10})alkyl, CF_3, cyano, nitro, hydroxy, alkyl, aryl, heteroaryl, aminosulfonyl, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, cycloalkyl, heterocycloalkyl, amino, thio, alkoxy, carbonyl group, imino group, sulfonyl group and sulfinyl group, each substituted or unsubstituted, with the proviso that at least one R_8 serves as V.

8. (original) A compound according to claim 7, wherein at least one R_8 is a primary, secondary or tertiary amine.

9. (original) A compound according to claim 7, wherein at least one R_8 is a substituted or unsubstituted heterocycloalkyl comprising a nitrogen ring atom or a substituted or unsubstituted heteroaryl comprising a nitrogen ring atom.

10. (original) A compound according to claim 7, wherein at least one R_8 is selected from the group consisting of $-NH_2$, $-NH(C_{1\text{-}5}\text{ alkyl})$, $-N(C_{1\text{-}5}\text{ alkyl})_2$, piperazine, imidazole, and pyridine.

11. (original) A compound according to claim 1, wherein R_2 is selected from the group consisting of



wherein r is 0-13 and each R_8 is independently selected from the group consisting of halo, perhalo$(C_{1\text{-}10})$alkyl, CF_3, cyano, nitro, hydroxy, alkyl, aryl, heteroaryl, aminosulfonyl, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, cycloalkyl, heterocycloalkyl, amino, thio, alkoxy, carbonyl group, imino group, sulfonyl group and sulfinyl group, each substituted or unsubstituted, with the proviso that at least one R_8 serves as V.

12. (original) A compound according to claim 11, wherein at least one R_8 is a primary, secondary or tertiary amine.

13. (original) A compound according to claim 11, wherein at least one R_8 is a substituted or unsubstituted heterocycloalkyl comprising a nitrogen ring atom or a substituted or unsubstituted heteroaryl comprising a nitrogen ring atom.

14. (original) A compound according to claim 11, wherein at least one R_8 is selected from the group consisting of $-NH_2$, $-NH(C_{1\text{-}5}\text{ alkyl})$, $-N(C_{1\text{-}5}\text{ alkyl})_2$, piperazine, imidazole, and pyridine.

15. (original) A compound according to claim 1, wherein R_2 is selected from the group consisting of 3-amino-piperidin-1-yl, 3-aminomethyl-pyrrolidin-1-yl, azetidin-1-yl, 3-aminoazetidin-1-yl, pyrrolidin-1-yl, 3-aminocyclopent-1-yl, 3-aminomethylcyclopent-1-yl, 3-aminomethylcyclohex-1-yl, hexahydroazepin-1-yl, 3-aminohexahydroazepin-1-yl, 3-amino-cyclohex-1-yl, piperazin-1-yl, homopiperazin-1-yl, 3-amino-pyrrolidin-1-yl, and R-3-aminopiperidin-1-yl, each substituted or unsubstituted.

16. (original) A compound according to claim 1, wherein R_2 is selected from the group consisting of a substituted or unsubstituted 3, 4, 5, 6 or 7 membered ring.

17-18. (cancelled)

19. (original) A compound according to claim 1, wherein at least one R_{12} is halogen.

20. (original) A compound according to claim 1, wherein at least one R_{12} is fluorine.

21-27. (cancelled)

28. (currently amended) A compound according to claim ~~21~~ 1, wherein Z is selected from the group consisting of $-CH_2-$, $-CH_2CH_2-$, $-CH_2CH_2CH_2-$, $-C(O)-$, $-CH_2C(O)-$, $-C(O)CH_2-$, $-CH_2-C(O)CH_2-$, $-C(O)CH_2CH_2-$, $-CH_2CH_2C(O)-$, $-O-$, $-OCH_2-$, $-CH_2O-$, $-CH_2OCH_2-$, $-OCH_2CH_2-$, $-CH_2CH_2O-$, $-N(CH_3)-$, $-NHCH_2-$, $-CH_2NH-$, $-CH_2NHCH_2-$, $-NHCH_2CH_2-$, $-CH_2CH_2NH-$, $-NH-C(O)-$, $-NCH_3-C(O)-$, $-C(O)NH-$, $-C(O)NCH_3-$, $-NHC(O)CH_2-$, $-C(O)NHCH_2-$, $-C(O)CH_2NH-$, $-CH_2NHC(O)-$, $-CH_2C(O)NH-$, $-NHCH_2C(O)-$, $-S-$, $-SCH_2-$, $-CH_2S-$, $-SCH_2CH_2-$, $-CH_2SCH_2-$, $-CH_2CH_2S-$, $-C(O)S-$, $-C(O)SCH_2-$, $-CH_2C(O)S-$, $-C(O)CH_2S-$, and $-CH_2SC(O)-$, each substituted or unsubstituted.

29. (currently amended) A compound according to claim ~~21~~ 1, wherein Z is selected from the group consisting of $-CH_2-$, $-C(O)-$, $-C(S)-$, $-C(NH)-$, $-C(NR_9)-$, $-O-$, $-N(H)-$, $-N(R_9)-$, and $-S-$.

30-31. (cancelled)

32. (currently amended) A compound according to claim ~~21~~ 1, wherein R_m is a substituted or unsubstituted phenyl.

33. (currently amended) A compound according to claim ~~21~~ 1, wherein R_m is selected from the group consisting of (2-cyano)phenyl, (3-cyano)phenyl, (2-hydroxy)phenyl, (3-hydroxy)phenyl, (2-alkenyl)phenyl, (3-alkenyl)phenyl, (2-alkynyl)phenyl, (3-alkynyl)phenyl, (2-nitro)phenyl, (3-nitro)phenyl, (2-carboxy)phenyl, (3-carboxy)phenyl, (2-carboxamido)phenyl, (3-carboxamido)phenyl, (2-sulfonamido)phenyl, (3-sulfonamido)phenyl, (2-tetrazolyl)phenyl, (3-tetrazolyl)phenyl, (2-aminomethyl)phenyl, (3-aminomethyl)phenyl, (2-amino)phenyl, (3-amino)phenyl, (2-hydroxymethyl)phenyl, (3-hydroxymethyl)phenyl, (2-phenyl)phenyl, (3-phenyl)phenyl, (2-$CONH_2$)phenyl, (3-$CONH_2$)phenyl, (2-CONH(C_1-$_7$)alkyl)phenyl, (3-CONH(C_1-$_7$)alkyl)phenyl, (2-CO_2(C_1-$_7$)alkyl)phenyl, and (3-CO_2(C_1-$_7$)alkyl)phenyl~~, -NH_2, -OH, (C_3-$_7$)alkyl, alkene, alkyne, -CCH, (C_3-$_7$)cycloalkyl, and -aryl~~, each substituted or unsubstituted.

34. (currently amended) A compound according to claim ~~21~~ 1, wherein R_1 is $-OR_{11}$, where R_{11} is selected from the group consisting of substituted or unsubstituted ~~alkyl, cycloalkyl,~~ aryl, heteroaryl, ~~heterocycloalkyl,~~ arylalkyl, heteroarylalkyl, bicycloaryl, and heterobicycloaryl.

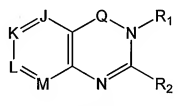
35. (currently amended) A compound according to claim ~~21~~ 1, wherein Z is a carbonyl.

36. (currently amended) A compound according to claim ~~21~~ 1, wherein R_1 is selected from the group consisting of -(CH_2)-(2-cyano)phenyl, -(CH_2)-(3-cyano)phenyl, -(CH_2)-(2-hydroxy)phenyl, -(CH_2)-(3-hydroxy)phenyl, -(CH_2)-(2-alkenyl)phenyl, -(CH_2)-(3-alkenyl)phenyl, -(CH_2)-(2-alkynyl)phenyl, -(CH_2)-(3-alkynyl)phenyl, -(CH_2)-(2-nitro)phenyl, -(CH_2)-(3-nitro)phenyl, -(CH_2)-(2-carboxy)phenyl, -(CH_2)-(3-carboxy)phenyl, -(CH_2)-(2-carboxamido)phenyl, -(CH_2)-(3-carboxamido)phenyl, -(CH_2)-(2-sulfonamido)phenyl, -(CH_2)-(3-sulfonamido)phenyl, -(CH_2)-(2-tetrazolyl)phenyl, -(CH_2)-(3-tetrazolyl)phenyl, -(CH_2)-(2-aminomethyl)phenyl, -(CH_2)-(3-aminomethyl)phenyl, -(CH_2)-(2-amino)phenyl,

-(CH_2)-(3-amino)phenyl, -(CH_2)-(2-hydroxymethyl)phenyl, -(CH_2)-(3-hydroxymethyl)phenyl, -(CH_2)-(2-phenyl)phenyl, -(CH_2)-(3-phenyl)phenyl, -(CH_2)-(2-$CONH_2$)phenyl, -(CH_2)-(3-$CONH_2$)phenyl, -(CH_2)-(2-$CONH(C_{1-7})$alkyl)phenyl, -(CH_2)-(3-$CONH(C_{1-7})$alkyl)phenyl, -(CH_2)-(2-$CO_2(C_{1-7})$alkyl)phenyl, -(CH_2)-(3-$CO_2(C_{1-7})$alkyl)phenyl, ~~-CH_2-NH_2, -CH_2-OH, -CH_2-(C_{3-7})alkyl, -CH_2-alkene, -CH_2-alkyne, -CH_2-CCH, -CH_2-(C_{3-7})cycloalkyl,~~ and -CH_2-aryl, each substituted or unsubstituted.

37. (currently amended) A compound according to claim ~~21~~ 1, wherein R_1 is selected from the group consisting of -(C_1)alkyl-aryl, -(C_1)alkyl-bicycloaryl, -aminoaryl, -aminoheteroaryl, -aminobicycloaryl, -aminoheterobicycloaryl, -O-aryl, -O-heteroaryl, -O-bicycloaryl, -O-heterobicycloaryl, -(S)-aryl, -(S)-heteroaryl, -(S)-bicycloaryl, -S-heterobicycloaryl, -C(O)-aryl, -C(O)-heteroaryl, -C(O)-bicycloaryl, -C(O)-heterobicycloaryl, -C(S)-aryl, -C(S)-heteroaryl, -C(S)-bicycloaryl, -C(S)-heterobicycloaryl, -S(O)-aryl, -S(O)-heteroaryl, -S(O)-bicycloaryl, -SO_2-heterobicycloaryl, -SO_2-aryl, -SO_2-heteroaryl, -SO_2-bicycloaryl, -SO_2-heterobicycloaryl, -$C(NR_9)$-aryl, -$C(NR_9)$-heteroaryl, -$C(NR_9)$-bicycloaryl, -$C(NR_9)$-heterobicycloaryl, each substituted or unsubstituted.

38. (currently amended) A compound ~~comprising of~~ Formula XXXIX:



XXXIX

wherein

Q is selected from the group consisting of CO, CS, or $C=NR_9$;

J, K, L, and M are each independently CR_{12}, provided that at least one of K and L is CR_{12} where R_{12} is not hydrogen;

R_1 is selected from the group consisting of a ~~substituted or unsubstituted~~ 3, 4, 5, 6 or 7 membered aryl ring, either unsubstituted or substituted with a substituent selected from the group

consisting of (C_{1-10})alkyl, (C_{3-12})cycloalkyl, hetero(C_{3-12})cycloalkyl, aryl(C_{1-10})alkyl, heteroaryl(C_{1-5})alkyl, (C_{9-12})bicycloaryl, hetero(C_{4-12})bicycloaryl, carbonyl (C_{1-3})alkyl, thiocarbonyl (C_{1-3})alkyl, sulfonyl (C_{1-3})alkyl, sulfinyl (C_{1-3})alkyl, imino (C_{1-3})alkyl, amino, aryl, heteroaryl, hydroxy, alkoxy, aryloxy, heteroaryloxy, carbonyl, cyano, nitro, halo, imino, sulfonyl and sulfinyl groups;

R_2 is ~~-UV, where U is a moiety providing 1-6 atom separation between V and the ring to which R_2 is attached and V comprises a basic nitrogen atom that is capable of interacting with a carboxylic acid side chain of an active site residue of a protein~~ selected from the group consisting of a 4, 5, 6 or 7 membered cycloalkyl or N-containing ring, the ring being substituted with one or more substituents selected from the group consisting of aldehyde, alicyclic, aliphatic, alkyl, alkylene, alkylidene, amide, amino, aminoalkyl, aromatic, aryl, bicycloalkyl, bicycloaryl, carbamoyl, carbocyclyl, carboxyl, carbonyl group, cycloalkyl, cycloalkylene, ester, halo, heterobicycloalkyl, heterocycloalkylene, heteroaryl, heterobicycloaryl, heterocycloalkyl, oxo, hydroxy, iminoketone, ketone, nitro, oxaalkyl, and oxoalkyl moieties;

each R_9 is independently hydrogen or is selected from the group consisting of alkyl, cycloalkyl, heterocycloalkyl, arylalkyl, heteroarylalkyl, bicycloaryl, and heterobicycloaryl, each ~~substituted or unsubstituted~~ unsubstituted or substituted with a substituent selected from the group consisting of aldehyde, alicyclic, aliphatic, alkyl, alkylene, alkylidene, amide, amino, aminoalkyl, aromatic, aryl, bicycloalkyl, bicycloaryl, carbamoyl, carbocyclyl, carboxyl, carbonyl group, cycloalkyl, cycloalkylene, ester, halo, heterobicycloalkyl, heterocycloalkylene, heteroaryl, heterobicycloaryl, heterocycloalkyl, oxo, hydroxy, iminoketone, ketone, nitro, oxaalkyl, and oxoalkyl moieties; and

each R_{12} is hydrogen or is independently selected from the group consisting of halo, perhalo(C_{1-10})alkyl, CF_3, alkyl, aryl, heteroaryl, aminosulfonyl, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, cycloalkyl, heterocycloalkyl, amino, thio, cyano, nitro, alkoxy, a carbonyl group, imine group, sulfonyl group and sulfinyl group, each ~~substituted or~~ unsubstituted or substituted with one or more substituents selected from the group consisting of aldehyde, alicyclic, aliphatic, alkyl, alkylene, alkylidene, amide, amino, aminoalkyl, aromatic, aryl, bicycloalkyl, bicycloaryl, carbamoyl, carbocyclyl, carboxyl, carbonyl, cycloalkyl, cycloalkylene, ester, halo, heterobicycloalkyl, heterocycloalkylene, heteroaryl, heterobicycloaryl, heterocycloalkyl, oxo, hydroxy, iminoketone,

ketone, nitro, oxaalkyl and oxoalkyl moieties, or two R_{12} are taken together to form a ring fused to or bridged to the ring formed by J, K, L and M.

39-47. (cancelled)

48. (original) A compound according to claim 38, wherein R_1 is a substituted or unsubstituted phenyl.

49. (cancelled)